Met Office

NEWS

£20 million to improve space weather forecasting

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The Government has announced £20 million pounds of new funding to help the UK cope with the potential impacts of space weather events.

The money, from the Government's Strategic Priorities Fund, will support research projects aimed at improving the ability of the Met Office to predict space weather events and therefore reduce their potential impact.

Prime Minister Boris Johnson said: "From solar flares to magnetic storms, space weather can have a massive impact on mobile phones, transport, GPS signals and the electricity networks we rely on every day at home.

The funding announced today will help turn Britain's pioneering research into practical solutions that will protect against any adverse disruption."

This funding will help transition UK world-leading space weather scientific knowledge into operational use at the Met Office Space Weather Operations Centre (MOSWOC) leading to an improvement in space weather forecasts for a range of users. This new programme will benefit not just to UK infrastructure operators but will also make additional forecast information available to international partners.

Head of MOSWOC, Mark Gibbs, has welcomed the funding announcement saying; "it will help to upgrade UK capabilities in space weather modelling and measurement. This is an important milestone in the development of space weather forecasts here in the UK and will see the biggest change in MOSWOC capability since the majority of services were introduced in 2014.

We look forward to working with UK universities and research institutes to maximise the return on this investment."

A key outcome of the programme will be forecasts that are much more specific to individual users e.g. better services to support future UK space launches, forecasts of the accuracy of GPS-type services (GNSS).

The project will brings together researchers funded by the Science and Technology Facilities Council (STFC) and the Natural Environment Research Council (NERC), with teams at the Met Office Space Weather Operations Centre (MOSWOC) – supported by the Department for Business, Energy and Industrial Strategy (BEIS), the Department for Transport and the Ministry of Defence. STFC's RAL Space department already works alongside MOSWOC to conduct research and provide instruments to study the Sun from space, including the development of a proposed European Space Agency space weather monitoring mission.

Science Minister Chris Skidmore said: "I am deeply impressed by the incredible strength of the UK space industry and the contribution it makes to life across the country, providing us with innovative solutions to complex problems and creating high-skilled jobs for more than 40,000 people.

“A truly strategic approach to space is needed now more than ever, to protect us from threats like space weather and to ensure we seize new opportunities such as satellite launch from the UK.

“The UK is looking to make an even more ambitious investment in European Space Agency programmes later this year, which will help develop our national capabilities and play a leading role in exciting, global efforts in space science and exploration."

This new national funding comes ahead of the European Space Agency Council of Ministers meeting in November, where space weather programmes will be a key priority for the UK.

The government has also confirmed it will establish the UK’s first National Space Council, with further details of the chair and membership of the Council to follow in the coming weeks.

The Met Office Space Weather Operations Centre (MOSWOC) is funded by UK Government to provide space weather forecast services to protect national infrastructure and space based capabilities. MOSWOC is one of only three space weather forecast centres globally that is manned 24/7/365 by expert forecasters and it works closely with the other two centres in the United States (NOAA Space Weather Prediction Centre and the US Air Force).

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